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COMPUTER-COMPONENT POWER-CONSUMPTION MONITORING AND CONTROL

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ABSTRACT OF THE INVENTION

5 An apparatus for regulating power allocated to components within a computer system
6 includes a sensor to sense power drawn by a first device within a computer system, the first
7 device having device resources needed to satisfy functional demand required of the first
8 device. A second sensor is provided to sense power drawn by a second device within the
9 computer system, the second device having device resources needed to satisfy functional
10 demand required of the second device. A power-monitoring module is provided to monitor
11 the power drawn and the functional demand required of the first and second devices. A
12 system control module, operably connected to the power-monitoring modules, is provided to
13 regulate power allocated to the first and second devices by optimizing use of the device
14 resources in accordance with the temperature, power drawn, and respective functional
15 demands of the devices.